

# MASTER OF SCIENCE IN PHYSICIAN ASSISTANT STUDIES (MSPA)

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## **MSPA 1330. Foundations in Medical Science. (1 Credit Hour)**

This course provides an introduction to the immune system and the microbes that colonize or cause disease in humans. Topics specifically in this course include basic and clinical immunology concepts and the basic biology of bacteria, viruses, fungi, and parasites, emphasizing foundational concepts that underlie their treatment and prevention.

## **MSPA 1331. Wellness. (2.5 Credit Hours)**

This course is designed to inform students on wellness topics such as preventative care, personal wellness, nutrition, diseases prevention, alternative therapies, and sexual health across the lifespan. Lastly, students should be prepared to educate future patients on wellness.

## **MSPA 1332. Pharmacology/Therapeutics I. (3 Credit Hours)**

This course series introduces the basic principles of medical pharmacology including pharmacokinetics, pharmacodynamics, and pharmacogenomics, mechanisms of action, contraindications, and adverse effects. Additionally, information regarding clinical therapeutics will be examined.

## **MSPA 1333. Pharmacology/Therapeutics II. (3.5 Credit Hours)**

This second course of the series examines pharmacodynamics, pharmacokinetics principles, contraindications, mechanisms of action and adverse effects for various pharmacological agents. Differences centered on populations across the lifespan will be discussed. Clinical therapeutics will be an emphasis of this course.

## **MSPA 1337. Clinical Medicine I. (8 Credit Hours)**

This course series covers common ailments found in the primary care setting with a focus on pathology, etiology, epidemiology, presentation, evaluation and management of various disease and disorders in the following areas of medicine: cardiology, pulmonology, hematology, gastroenterology, and infectious disease.

## **MSPA 1338. Clinical Medicine II. (8 Credit Hours)**

This course series covers common ailments found in the primary care setting with a focus on pathology, etiology, epidemiology, presentation, evaluation and management of various disease and disorders in the following areas of medicine: neurology, nephrology/urology, endocrinology, behavioral medicine, orthopedics, rheumatology, and dermatology.

## **MSPA 1339. Clinical Medicine III. (4 Credit Hours)**

This course series covers common ailments found in the primary care setting with a focus on pathology, etiology, epidemiology, presentation, evaluation and management of various disease and disorders in the following areas of medicine: ophthalmology, ENT, and women's health/reproductive.

## **MSPA 1340. Program to Practice I. (1 Credit Hour)**

This spring term course provides preliminary instruction for the PA student's Capstone Project as well as preparation for clinical rotations. During this course the student completes the required online modules offered by the Collaborative Institutional Training Initiative (CITI) program on human subject research and the responsible conduct of research. Students will begin their Medication-Assisted Treatment (MAT) Waiver Training and apply for their National Provider identifier (NPI) number. A review of writing style guidelines and plagiarism training is also provided.

## **MSPA 1359. Physiology / Pathophysiology. (6 Credit Hours)**

This clinically oriented course provides instruction on the overall physiology of the human body. Normal physiological states, as well as changes that occur in disease, infection, and trauma will be discussed. Students will be able to use this information to more effectively diagnose and treat their patients, as well as provide students with information that they may use to educate their patients regarding the disease process.

## **MSPA 1360. Clinically Oriented Anatomy. (5.5 Credit Hours)**

This course is an integrated approach to the study of human body structure, tying together microscopic and macroscopic structure related to function and embryological development. Lectures and cadaveric dissections/prosections highlight the interdependence of the organ systems, while functional concepts and internal structure are further related to surface anatomy as a basis for performing a physical examination.

## **MSPA 1364. Nutrition. (1 Credit Hour)**

This course is an introduction to clinical nutrition. Nutritional assessment, macro and micronutrients, and various clinical topics such as obesity, physical activity, and adverse food reactions are discussed.

## **MSPA 1365. Evidence Based Practice. (1 Credit Hour)**

This is an introductory course to research methodology, clinical epidemiology, and the critical evaluation of evidence-based publications. The student will learn the basics of research design, biostatistics, and how to conduct a literature review. This course promotes clinical reasoning and prepares the student for patient-centered, evidence-based clinical practice.

## **MSPA 1367. Health System and Policy. (2.5 Credit Hours)**

This introductory course is designed to provide students with an understanding of the business of healthcare including coding and billing, health care delivery systems, and health policy. Instruction on public health as they related to the role of the practicing PA, quality improvement and risk management, and legal aspects is included in this course. Cultural aspects of healthcare delivery are also discussed.

## **MSPA 1371. Medical Pharmacology. (5.5 Credit Hours)**

This course introduces the basic principles of medical pharmacology. The course will provide a foundation in the areas of general pharmacological concepts such as pharmacokinetics, pharmacodynamics, and pharmacogenomics - which are relevant to all pharmacotherapeutic and toxic agents. Additionally, topics relevant to specific drug classes such as clinical utility, mechanisms of action, and adverse effects will be presented in each unit.

## **MSPA 1372. Intro to Clinical Medicine (ICM I). (7.5 Credit Hours)**

This course is part of the ICM series covering the pathology, etiology, epidemiology, presentation, evaluation and management of various diseases and disorders. Students will learn how to appropriately order and interpret diagnostic tests and formulate differential diagnosis and management plans for common diseases found in the primary care setting. Emphasis in this course will be on Behavioral Health, Orthopedic and Rheumatologic conditions, Dermatologic conditions, and Infectious Diseases.

## **MSPA 1375. Immunology / Microbiology. (2.5 Credit Hours)**

This course is an overview of the human immune system and the extrinsic pathogens that contribute to morbidity and mortality. Topics specifically covered through lecture and lab sessions include bacteria, viruses, fungi, and parasites. Pathology topics include cell injury, hemodynamic disorders, neoplasms, and inflammation and repair. There is a clinically-oriented emphasis on the etiology of infectious disease, epidemiology, clinical presentation, and diagnosis. The laboratory exercises focus on techniques performed in modern clinical practice.

**MSPA 1376A. Clinical Skills A. (2 Credit Hours)**

This course series is designed to develop students' hands-on medical skills. Students will develop an understanding of laboratory and imaging studies as well as details of when to appropriately order and interpret findings. Students will have instruction on gathering a patient history and documentation of findings. Students will learn basics of aseptic technique, wound management, and laceration repair. Students will also learn skills to work in interprofessional teams and cultivate a growth mindset.

**MSPA 1376B. Clinical Skills B. (2 Credit Hours)**

This course series is designed to develop students' hands-on medical skills. Students develop abilities in interpretation of heart and lung sounds, cardiac resuscitation, chest procedures, placement of intravenous access, administration of injections, pulmonary function, gastroenterological procedures, ultrasounds basics, and prescription writing. Students will further skills in interprofessional teams.

**MSPA 1376C. Clinical Skills C. (2 Credit Hours)**

This course series is designed to develop students' hands-on medical skills. Students develop abilities in local anesthesia administration, fluid and electrolyte management, foley catheterization, insulin management, mental health stigma consciousness, casting, dermatologic procedures, disaster preparedness, and ultrasound. Students continue to develop skills for work in interprofessional teams.

**MSPA 1376D. Clinical Skills D. (1.5 Credit Hours)**

This course series is designed to develop students' hands-on medical skills. Students develop abilities in ophthalmologic and ENT procedures, contraception, gynecologic examinations, male urologic exams, pediatric and geriatric examinations, child and dependent adult abuse, surgical skills, and ultrasound.

**MSPA 1377. Clinical Medicine I. (8 Credit Hours)**

This course series covers common ailments found in the primary care setting with a focus on pathology, etiology, epidemiology, presentation, evaluation and management of various disease and disorders in the following areas of medicine: cardiology, pulmonology, hematology, gastroenterology, and infectious disease.

**MSPA 1378. Medical Genetics. (1 Credit Hour)**

This course is an introduction to the basic concepts of human and medical genetics. Through a series of online modules, students will investigate the basics of DNA and genetic disease, modes of inheritance, meiosis, non-Mendelian inheritance, and concepts of genetic epidemiology. A series of case studies will help the student discover the impact of genetics in clinical practice. Utilizing their family history, the students will develop their own family pedigree.

**MSPA 1381. Intro to Health Care Delivery Systems. (2 Credit Hours)**

This course is designed to provide a basic level of knowledge in the structure and function of the health care delivery system, medical law, and socioeconomic issues, including social determinants of health as they apply to the PA and PA/physician team. Issues discussed will include reimbursement, inequality to accessing health care issues, health care policies, and the roles of the different members of the health care professional team.

**MSPA 1382. Introduction to Ethics. (1.5 Credit Hours)**

The preparation of a competent medical provider includes not only medical knowledge but also an understanding of professionalism and ethical principles. This course challenges the PA student to analyze, from an ethics perspective, clinical situations such as palliative care, confidentiality, legal issues and other emotionally charged topics. Instruction is provided via lectures, small group discussions and written assignments.

**MSPA 1384. Physical Diagnosis. (2.5 Credit Hours)**

This course is designed to introduce the student to patient history taking, documentation, and communication skills. Students will use medical diagnostic equipment and learn the skills needed to perform physical examinations and document normal and abnormal findings on others across the lifespan.

**MSPA 1385. Clinical Applications I. (1 Credit Hour)**

This course series is developed to develop students' abilities to apply medical knowledge to clinical scenarios both through case-based learning as well as simulated learning environments with a focus on wellness and systems of cardiology, pulmonology, hematology, gastroenterology, and infectious disease.

**MSPA 1386. Clinical Applications II. (1 Credit Hour)**

This course series is developed to develop students' abilities to apply medical knowledge to clinical scenarios both through case-based learning as well as simulated learning environments with a focus on neurology, nephrology/urology, endocrine, behavioral medicine, orthopedics, rheumatology, and dermatology.

**MSPA 1387. Clinical Applications III. (1 Credit Hour)**

This course series is developed to develop students' abilities to apply medical knowledge to clinical scenarios both through case-based learning as well as simulated learning environments with a focus on ophthalmology, ENT, women's health and reproduction.

**MSPA 1388A. PA Professional Practice A. (1.5 Credit Hours)**

This course is designed to introduce students to the PA profession including the history, organizations, communication, and professionalism. Students will be presented with ethical principles and cultural considerations as related to patient care.

**MSPA 1388B. PA Professional Practice B. (3 Credit Hours)**

This course is designed to further students' understanding of the PA profession and ethical principles. Students will explore various ethical dilemmas while understanding the PA scope of practice.

**MSPA 1389. Clinical Patient Assessment. (2.5 Credit Hours)**

This course will build upon the skills from the Physical Diagnosis course to refine the physician assistant student's ability to efficiently gather a pertinent and relevant medical history as well as introduce the student to the concept of clinical reasoning. This information will be used to conduct the physical examination, identify pertinent problems, develop differential diagnoses, order appropriate diagnostic evaluations, and commit to a management plan for simulated patients.

**MSPA 1393A. PA Professional Issues I. (1 Credit Hour)**

This course is designed to introduce the student to the PA profession: its history, organizations, professionalism issues, legal aspects, and guidelines for ethical conduct. This course explores current issues and future projections in the PA profession.

**MSPA 1393B. PA Professional Issues II. (0.5 Credit Hours)**

This course is designed to introduce the student to the PA profession: future of the profession, the physician/PA team, professional relationships, patient consent, HIPAA, credentialing, licensure, and continuing medical education. This course explores cultural issues and syndicate health professional careers.

**MSPA 1394. Intro to Clinical Med III (ICM III). (11.5 Credit Hours)**

This course is part of the ICM series covering the pathology, etiology, epidemiology, presentation, evaluation, and management of various diseases and disorders. Students will learn how to appropriately order and interpret diagnostic tests and formulate differential diagnosis and management plans for common diseases found in the primary care setting. Emphasis in this course will be on women's health, endocrinology, and pediatric conditions, ENT (ear, nose and throat), renal diseases, and ophthalmology.

**MSPA 1395. Clinical Applications I. (1 Credit Hour)**

This course series is developed to develop students' abilities to apply medical knowledge to clinical scenarios both through case-based learning as well as simulated learning environments with a focus on wellness and systems of cardiology, pulmonology, hematology, gastroenterology, and infectious disease.

**MSPA 1398. Intro to Clinical Med IV (ICM IV). (7 Credit Hours)**

This course is part of the ICM series covering the pathology, etiology, epidemiology, presentation, evaluation and management of various diseases and disorders. Students will learn how to appropriately order and interpret diagnostic tests and formulate differential diagnosis and management plans for common diseases found in the primary care setting. Emphasis in this course will be on neurology, emergency medicine, and geriatrics.

**MSPA 2302. Behavioral and Mental Health. (4 Credit Hours)**

Behavioral and Mental Health is a required course that emphasizes history taking, physical examination, diagnostic workup, and management of patients seeking behavioral and mental health care. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2303. Emergency Medicine. (2-4 Credit Hours)**

Emergency Medicine is a required course that emphasizes problem-focused history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of a differential diagnosis list, assessment and management plan of patients seeking acute and emergent health care needs in the emergency department. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2310. Global Health Selective. (4 Credit Hours)**

This Global Health Selective course is one of four selective offerings in the clinical year. The course promotes an understanding of issues in health care and health equity both domestically and globally. This includes facilitating international opportunities for students to learn about medicine, health care systems and the social determinants of health.

**MSPA 2311. Surgical Selective. (2-4 Credit Hours)**

Surgical Selective is one of four selective offerings in the clinical year. This course emphasizes surgery focused history-taking, physical examination, diagnostic lab and imaging, assessment and plans for patients requiring pre-, intra-, and post-operative management of acute, emergent, and chronic conditions. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors. Students will be able to apply the knowledge and skills gained in this course to other clinical medicine settings.

**MSPA 2312. Primary Care Selective. (2-8 Credit Hours)**

Primary Care Selective is one of four selective offerings in the clinical year. This course emphasizes age and gender-appropriate history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment and management plans for patients in primary care. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2313. Specialty Medicine Selective. (4-8 Credit Hours)**

Specialty Medicine Selective is one of four selective offerings in the clinical year. This course emphasizes age and gender-appropriate history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment, and management plans for patients in selected medical specialties. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2333. Women's Health. (2 Credit Hours)**

Women's Health is a required course that emphasizes gynecological and prenatal history taking, physical examination, screening techniques, diagnostic procedures, assessments, and management plans. This course provides a variety of learning opportunities that enable students to continue to develop skills in clinical reasoning, interprofessional relationship building and communication as they apply to women's health.

**MSPA 2334. Pediatrics. (2 Credit Hours)**

Pediatrics is a required course that emphasizes age and gender-appropriate medical history taking, physical examinations, screening techniques, diagnostic procedures, and development of differential diagnosis lists, assessment and management plans for infants, children, and adolescents. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2335. Surgery. (4 Credit Hours)**

Surgery is a required course that emphasizes surgery-focused history taking, physical examination, diagnostic lab and imaging, assessment and treatment plans for patients requiring pre-, intra- and post operative management of surgical conditions. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2336A. Internal Medicine A. (4 Credit Hours)**

Internal Medicine A is a required course that emphasizes history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment and management plans for adult and elderly patients. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2336B. Internal Medicine B. (4 Credit Hours)**

Internal Medicine B is a required course that emphasizes history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment and management plans for adult and elderly patients. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2336C. Internal Medicine C. (4 Credit Hours)**

Internal Medicine C is a required 4-credit course that emphasizes history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment and management plans for adult and elderly patients. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2337A. Family Medicine A. (4 Credit Hours)**

Family Medicine A is a required course that emphasizes age and gender-appropriate history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment and management plans for patients across the lifespan. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2337B. Family Medicine B. (4 Credit Hours)**

Family Medicine B is a required course that emphasizes age and gender-appropriate history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment and management plans for patients across the lifespan. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2337C. Family Medicine C. (4 Credit Hours)**

Family Medicine C is a required 4-week course that emphasizes age and gender-appropriate history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment and management plans for patients across the lifespan. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2338. Primary Care. (4 Credit Hours)**

Primary Care is a required course which emphasizes age and gender-appropriate history taking, physical examination, diagnostic work-up, assessment of lab and imaging studies, and development of differential diagnosis lists, assessment and management plans for patients in primary care. This course provides a variety of learning opportunities to enhance the student's clinical and technical skills, clinical reasoning abilities, interpersonal skills, medical knowledge, and professional behaviors.

**MSPA 2350A. Foundations of Clinical Practice A. (3 Credit Hours)**

Foundations of Clinical Practice A is a required course which will build upon the knowledge and skills acquired during the didactic phase of the program allowing continued development and focused attention in key areas which will assist students in transitioning to clinical rotations. Students will continue research, planning, and progress related to their Capstone projects. Student progress will be formatively assessed using a variety of modalities to monitor student progress in meeting program learning competencies related to medical knowledge, technical skills, professionalism, and overall commitment to patient-centered care.

**MSPA 2350B. Foundations of Clinical Practice B. (1.5 Credit Hours)**

Foundations of Clinical Practice B is a required course in which students will continue to develop and refine key skills necessary for practice as a physician assistant. Key concepts will focus on interprofessional collaboration, social context of health and disease, financial and professional aspects of healthcare delivery, and patient-centered medical care. Students will continue research, planning, and progress related to their Capstone projects. Formative and summative assessments using a variety of modalities will be used to monitor student progress in meeting program learning competencies related to medical knowledge, technical skills, professionalism, and overall commitment to patient-centered care.

**MSPA 2350C. Foundations of Clinical Practice C. (1 Credit Hour)**

Foundations of Clinical Practice C is the third required Foundations course during which students will complete their Capstone projects. The course will culminate in multiple summative assessments using a variety of modalities to ensure students have met program learning competencies related to medical knowledge, technical skills, professionalism, and overall commitment to patient-centered care and enabling students to understand how education prepares them for the next stage in training and for their ongoing practice and maintenance of certification.